

# **FDS**

### 2016 Betasso Water Treatment Facility Capital Improvements Project

Prepared by J. Hemmerle/HDR Engineering, Inc.



### January 2017

Contractor:
Moltz Construction, Inc.

**Designer:** HDR Engineering, Inc

Award Date: July 22, 2016

Notice to Proceed: Aug. 5, 2016

Project Substantial Completion Date:

Dec. 1, 2018

Original Duration: 938 Days

Days Added by CO: 0

Time Percent Complete: 16%

Cost Percent Complete: 13%

Award Amount: \$27,269,000 Change Order Total: \$ (0) Current Contract Value: \$27,269,000 Invoiced to Date: \$3,563,842

Cost Growth: 0%

Schedule Growth: 0 Days





#### 1/26/2017- Erecting tower crane at Pretreatment Basins.

#### **Schedule and Budget Status**

MCI has completed work for 13 percent of the project value within 16 percent of the available contract time. Their current schedule update shows them completing the contract on time. Near-term milestones that MCI is working on include completing structural repairs and interior coating on Clearwell 2 and returning Filters 5 thru 8 to service.

No Change Orders have been issued to date for the project. There have been 16 Work Change Directives, 9 Change Proposal Requests, and 5 Field Orders initiated on the project.

#### **Accomplishments/Highlights**





Moltz Construction, Inc., (MCI), has completed demolition of the existing drying pad and containment wall at the site of the new Dewatering Building. The Equalization Tanks and the Valve Vault structures have been constructed. MCI is preparing for a hydrostatic test on the basins.

At the Sedimentation Basins, MCI is demoing the existing sludge collection and flocculation equipment for Basin 2. Reinforcement of the interior structures inside Basins 2 and 4 have been completed. MCI is erecting a tower crane 25 meters tall on-site to utilize for removal of the basins concrete roof structure and additional construction work.

In the Filter Building, MCI has been working on Filters 5 through 8. The crew demoed the existing concrete troughs and surface wash piping, removed the filter material, and resurfaced the walls. The crew is currently installing the new FRP troughs in Filter 8 and preparing for the new filter media installation.

At Clearwell 2, MCI removed the existing interior protective coating and has applied primer for the new coating system. A structural assessment of the condition of the tank was performed by HDR and concluded that a new roof and supporting structure was required. Work on removal and replacement of the tank roof is currently underway.

In the Pretreatment Gallery, MCI has been working on removal and replacement of valves and piping. Shutdown of half the filters by the city allowed for the installation of new valves on the Filter Influent, Back Wash Waste, Back Wash Supply, and Surface Wash piping for Filters 5 through 8. MCI is currently installing the actuators for all the new valves.

An additional shutdown of Basins 2 through 4 facilitated demolition and installation of new sections of pipe and valves on the Raw Water influent line. Interim pipe work will be completed soon to allow Basins 3 and 4 to be brought back into service.

#### **Construction Accomplishments and Milestones**

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09/22/2016- Demolition of the drying pads and containment wall at the Dewatering Building site.

09/27/2016- Removal of ground cover over the existing basins.



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10/03/2016- Demolition of surface wash piping in Filter 7.

10/07/2016- Concrete placement for the EQ Basins and Valve Vault slab.





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10/19/2016- Installation of the new 36" Filter Influent header valve.

10/28/2016- Erection of the permanent bracing support inside Basin 4.



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### **2016 Betasso Water Treatment Facility**

#### **Capital Improvements Project**

11/08/2016- Installing reinforcement steel for the Valve Vault walls at the Dewatering Building.

11/08/2016- Removing existing filter media inside Filter 8.









#### **Capital Improvements Project**

11/18/2016- Installation of FRP material for concrete strengthening of Basin 2 column.

11/23/2016- Sand blasting interior shell of Clearwell 2.





#### **2016 Betasso Water treatment Facility**

#### **Capital Improvements Project**

12/09/2016- Initial removal of double tee beams for basin access.

12/14/2016- Demolition of flocculation equipment inside Basin 2.





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#### **Capital Improvements Project**

12/27/2016- Installation of conduit for duct bank between MHHs #11 and #12.

12/28/2016- Installation of new 36" Back Wash Waste valve for Filter 7.



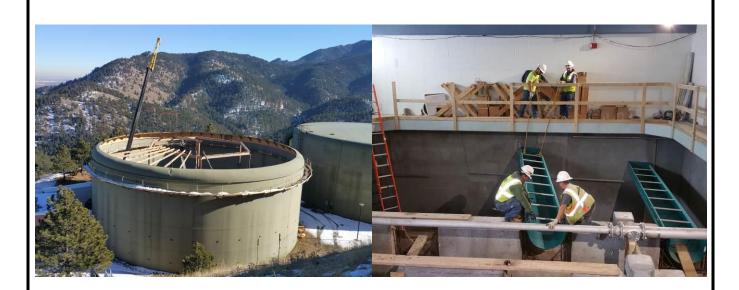


#### **2016 Betasso Water Treatment Facility**

#### **Capital Improvements Project**

01/19/2017-Demolition of the Clearwell 2 roof.

01/23/2017 Installation of the new FRP filter troughs in Filter 8.







Upcoming Activities/Milestones	Planned Date
Demolition of double tee concrete beams over the existing Basins 2 and 3 will start in late January. A 25 meter tower crane will be used to remove the concrete beams, which will weigh up to 10 tons each. The crane will remain on site through the end of 2018 for use with demolition and construction of the new basins and PreTreatment Building.	01/30/2017
MCI will start receiving filter media in the first week of February for installation in Filters 5 through 8, with deliveries continuing every other week through March. A total of 32 truckloads will be delivering 220 tons of gravel, 264 tons of silica sand, and 210 tons of anthracite for the four basins.	02/06/2017
Concrete placement for the new sedimentation basins is planned for mid-March. This work was originally scheduled to start in October, but the city was able to decommission Basin 2 for demolition earlier than planned.	03/13/2017
Clearwell 2 will be brought back into service by April 15 <sup>th</sup> . MCI and their subcontractors will have completed demolition of the existing roof, raising the tank height 3 feet, installing a new steel roof with support structure, and applying a 3-coat protective coating to the entire tank interior.	04/15/2017